IT'S ABOUT TIME

Note to teachers: This supplement includes discussion guide and lessons for teacher and students to use with the Michigan Time Traveler page. Feel free to reproduce the pages in this supplement to use with students.

Discussion Guide: (*Michigan Social Studies Standard 1.1 Time and Chronology*)

1. What is a millennium?
2. What is Y2K?
3. Use the information in "Happy New Millennium" to explain why January 1, 2001, is the beginning of the new millennium.
4. What was the first day of the 20th century? The last day? What was the first day of the first century? The last day?
5. What was the first day of the first millennium? The last day?
6. What was the first day of the second millennium? The last day?
7. What will be the first day of the third millennium? The last day?
8. Three options were considered for the Capitol in 1963: razing the structure and building a new building, preserving the exterior and renovating the interior, or building an addition to the old structure. What would be the positive and negative aspects of each option? Which would be the best solution? Why?
9. Use a globe to find the first place on earth to begin the new millennium – it's the first place west of 0° longitude, the International Dateline. (Kiritimati on the Christmas Islands)
10. Use a globe to find the last place on earth to begin the new millennium – it's the first place east of the dateline. (Samoa)

Millennium Internet Links:

The paintings of "Out of Time" are just a few of the designs and art that scientists and illustrators imagined about the future. Visit the "Dreams of Space" site for more art of Jack Coggins and others.
http://sun3.lib.uci.edu/~jsisson/1949-1953.htm.

For information about holidays, countries, and cultures throughout the year, visit Multi-Cultural Calendar:
http://www.kidlink.org/KIDPROJ/MCC/.

For information about Dennis the Short (aka Dionysius Exiguus), visit this site:
http://www.abc.net.au/2000/mill/whenend.htm.

For a complete listing of the world's population, visit the U. S. Bureau of Census:
http://www.census.gov/ipc/www/worldpop.html.

Activity One: (*Michigan Social Studies Standard I.1 Time and Chronology*)
Teacher and students can brainstorm a list of the different ways people communicate and the different forms of media we use, from prehistory times to present (cave drawings, pencil, radio, internet, etc.). Next, number the items from earliest to most current. Finally, ask students to make predictions about future media inventions.

Activity Two: (*Michigan Mathematics Standard IV.3 Number Relationships*)
Using the numbers "2-0-0-1", how many math problems can you create? (for instance, 20-10 = ___, 200 x 1 = ___)

Activity Three: (*Michigan Social Studies Standard I.1 Time and Chronology*)
This three-part lesson enhances students' chronological thinking. Students consider historical events and decide the order in which they occurred. They also make predictions about the future. After each part of this lesson, teacher should encourage discussion about reasons for students' opinions so that the children can make reasonable and knowledgeable predictions.

This lesson begins with the teacher randomly listing the following eight events (without the dates) on the board, and asking students to put them in the correct sequence. Be sure to encourage students to substantiate their reasons for the order they choose.

105 AD Invention of paper
950 AD Invention of playing cards
1453 Gutenberg Bible is printed
1565 Invention of pencil
1770 Invention of eraser
1904 First comic book
1991 Three out of four homes own VCRs.
1995 Sony demonstrate the flat TV set.

Next, the teacher should make one copy of the Time Line page and cut it into strips so that the only the events (no dates) will be used by students. Keep the original with the corresponding dates as the answer key. Give each student one historical event strip and ask the students to line up as a time line in the order that they think they events occurred. **Note:** "First SOLO sea voyage around the world is a type of "discrepant fact," not meant to fool our students, but to help them read carefully and think critically.

Finally, have students make predictions about future events, write their ideas on paper, and then repeat the action of lining up chronologically according to their opinions about the order of their events.

Activity Four: (Michigan Mathematics Strand: Data Analysis and Statistics)

Copy the "Estimates of the World's Population 1950-2050" sheet for each student, and ask students to consider the world population for 1950 (2,555,078,074) and make an estimate of the world population for 1960. After all students have written an estimate, teacher shows the correct population and students write the number in the "Actual Population" column. Students then subtract their estimate from the actual number, and record that number in the "Difference" column. Lesson continues with students estimating each decade's population and teacher showing correct number after each estimation. Students should also figure the difference column after each decade. As this lesson continues, students' estimates will become more accurate as they begin to see population trends.

1960: 3,039,332,401
1970: 3,707,610,112
1980: 4,456,705,217
1990: 5,283,755,345
2000: 6,080,141,683
2010: 6,823,634,553
2020: 7,518,010,600
2030: 8,140,344,240
2040: 8,668,391,454
2050: 9,104,205,830

Student page

Estimates of the World's Population 1950-2050			
YEAR	STUDENT ESTIMATE OF WORLD POPULATION	WORLD POPULATION *(from U.S. Bureau of Census)*	DIFFERENCE
1950	2,555,078,074	2,555,078,074	
1960			
1970			
1980			
1990			
2000			
2010			
2020			
2030			
2040			
2050			

Time Line

1869	**Transcontinental railroad is completed.**
1967	**First solo sea voyage around the world is completed.**
1977	**Premier of *Star Wars***
1988	**15-year-old receives patent for Velcro invention.**
1869	**Chewing gum patented.**
1898	**Kellogg's cornflakes invented**
1983	**First cordless phone**
1911	**First photograph is taken from an airplane**
1690	**First paper money issued in America**
1796	**America's first elephant arrives**
1819	**Bicycle patented**
1947	**Chuck Yeager flies faster than the speed of sound**
1923	**Garrett H. Morgan patents the traffic light**
1793	**First hot air balloon ride in America**
1872	**Toothpick manufacturing machine patented**
1894	**Coca Cola sold in bottles for the first time**
1823	**Roller skates patented**
1803	**Louisiana Purchase (375 million acres of land west of the Mississippi River!)**
1892	**Toothpaste tube invented**
1776	**Invisible ink first used**
1498	**Toothbrush invented in China**
1963	**First woman in space (Valentina Tereshkova)**
1846	**Discovery of Planet Neptune**
1797	**First parachute jump**
1851	**First bathtub in the White House**
1924	**First coast-to-coast radio broadcast**
1904	**Tea bag invented by Thomas Sullivan**
1938	**Superman first appears in comics**
1888	**Ballpoint pen patented**